(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 28 July 2005 (28.07.2005)

PCT

(10) International Publication Number WO 2005/067508 A3

(51) International Patent Classification⁷: F02B 33/10

(21) International Application Number:

PCT/US2004/043938

(22) International Filing Date:

28 December 2004 (28.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/533,599

2 10.

2 January 2004 (02.01.2004) U

- (71) Applicant and
- (72) Inventor: HIGGINS, Darrell, Grayson [US/US]; 4884 Denise Dr., Trinity, NC 27370 (US).
- (74) Agent: PITTS, Robert, W.; P.O. Box 11483, Winston-Salem, NC 27116-1483 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

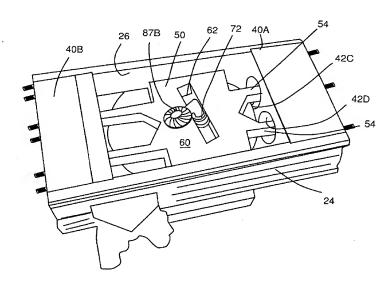
— of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: SLIDE BODY INTERNAL COMBUSTION ENGINE



(57) Abstract: An internal combustion engine includes a slide body (50) having a plurality of rigidly mounted pistons (56A-D) on opposite ends of the slide body. The slide body reciprocates and is connected to a flywheel (70) by shaft (74) and bearing which extends through an angled track in the slide body. As the pistons impart linear movement to the slide body, the flywheel and a drive shaft rotate. Both the slide body and the flywheel are mounted on the interior of the engine. Magnets on the flywheel rotate relative to stationary coil conductors to induce a current. The housing includes four panels, which can be easily assembled and disassembled, which form a housing compartment (10) in which the linearly movable slide piston subassembly and the rotating flywheel are positioned.



(88) Date of publication of the international search report: 29 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.